

CLAIMS:

What is claimed is:

1. A lamp adjuster comprising:

a housing;

5 a motor attached to the housing;

a gear journaled at least partially by the housing;

an output shaft passing at least partially through and operably connected to the motor;

and

a ball positioned with respect to an end of the output shaft, motorized movement of
10 the ball accomplished by operation of the motor and manual movement of the ball
accomplished by rotation of the gear.
2. The lamp adjuster of claim 1 wherein the housing includes a drive input locator into
which a driver can be inserted for rotating the gear.
3. The lamp adjuster of claim 1 wherein the gear is an anti-rotation gear operably
15 connected to the output shaft such that the anti-rotation gear prevents rotation of the output
shaft when the motor is operating and such that rotating the anti-rotation gear causes rotation
of the output shaft.
4. The lamp adjuster of claim 1 wherein the gear is a drive gear.

5. The lamp adjuster of claim 4 wherein the ball is on an end of a ball insert, the ball insert operably engaged to both the output shaft and the drive gear such that rotating the drive gear causes movement of the ball without movement of the output shaft.

6. The lamp adjuster of claim 5 further comprising a clutching mechanism disposed
5 between the ball insert and the drive gear.

7. The lamp adjuster of claim 6 wherein the clutching mechanism includes clutching tabs formed on the ball insert.

8. The lamp adjuster of claim 5 wherein the ball insert includes clutching tabs that engage the drive gear.

10

9. A lamp assembly comprising:

a mounting bracket;

a lamp pivotally positioned on the mounting bracket; and

an adjuster including a housing, a motor attached to the housing, a gear journaled at

15 least partially by the housing, an output shaft passing at least partially through and operably connected to the motor, and a ball positioned with respect to an end of the output shaft, motorized movement of the ball accomplished by operation of the motor and manual movement of the ball accomplished by rotation of the gear.

10. The lamp assembly of claim 9 wherein the housing includes a drive input locator into
20 which a driver can be inserted for rotating the gear.

11. The lamp assembly of claim 9 wherein the gear is an anti-rotation gear operably connected to the output shaft such that the anti-rotation gear prevents rotation of the output shaft when the motor is operating and such that rotating the anti-rotation gear causes rotation of the output shaft.

5 12. The lamp assembly of claim 9 wherein the gear is a drive gear.

13. The lamp assembly of claim 12 wherein the ball is on an end of a ball insert, the ball insert operably engaged to both the output shaft and the drive gear such that rotating the drive gear causes movement of the ball without movement of the output shaft.

14. The lamp assembly of claim 13 further comprising a clutching mechanism disposed
10 between the ball insert and the drive gear.

15. The lamp assembly of claim 14 wherein the clutching mechanism includes clutching tabs formed on the ball insert.

16. The lamp assembly of claim 13 wherein the ball insert includes clutching tabs that engage the drive gear.